

## REQUEST FOR ACCESS OF ABANDONED APPLICATION UNDER 37 CFR 1.14(a)

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In re Application of

Boyle et al.

Application Number	Filed
026,957	3-5-93
Group Art Unit	Examiner
	Robert D. Burdens

Assistant Commissioner for Patents  
Washington, DC 20231

Paper No. A19

I hereby request access under 37 CFR 1.14(a)(3)(iv) to the application file record of the above-identified ABANDONED application, which is: (CHECK ONE)

(A) referred to in United States Patent Number 5654407, column \_\_\_\_\_

(B) referred to in an application that is open to public inspection as set forth in 37 CFR 1.11, i.e.,  
Application No. \_\_\_\_\_, filed \_\_\_\_\_, on page \_\_\_\_\_ of  
paper number \_\_\_\_\_

(C) an application that claims the benefit of the filing date of an application that is open to public  
inspection, i.e., Application No. \_\_\_\_\_, filed \_\_\_\_\_, or

(D) an application in which the applicant has filed an authorization to lay open the complete  
application to the public.

Please direct any correspondence concerning this request to the following address:

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Unit: \_\_\_\_\_



US005654407A

**United States Patent** [19]

Boyle et al.

**[11] Patent Number:** 5,654,407  
**[45] Date of Patent:** Aug. 5, 1997**[54] HUMAN ANTI-TNF ANTIBODIES****[75] Inventors:** Petra Boyle, Pinole; Gayle D. Wetzel, Martinez; Kenneth J. Lembach, Danville, all of Calif.**[73] Assignee:** Bayer Corporation, Berkeley, Calif.**[21] Appl. No.:** 435,246**[22] Filed:** May 5, 1995**Related U.S. Application Data****[63]** Continuation of Ser No. 145,060, Oct. 29, 1993, abandoned, which is a continuation-in-part of Ser. No. 26,957, Mar. 5, 1993.**[51] Int. Cl. 6** C07K 16/24**[52] U.S. Cl.** 530/388.15; 424/142.1; 424/145.1; 424/158.1; 435/335; 530/388.23; 530/388.24**[58] Field of Search** 424/142.1, 145.1, 424/158.1; 435/70.21, 172.2, 335; 530/388.15, 388.23, 388.24, 389.2**[56]****References Cited**  
**PUBLICATIONS**Rhein, R., "Another Sepsis Drug Down—Immunex' TNF Receptor," *Biotechnology Newswatch* Oct. 4, 1993, McGraw Hill, Publishers., pp. 2-3.Boyle et al., "A Novel Monoclonal Human IgM Autoantibody Which Binds Recombinant Human and Mouse Tumor Necrosis Factor- $\alpha$ ," *Cell. Immunol.* 152:556-568, 1993.Boyle et al., "The B5 Monoclonal Human Autoantibody Binds to Cell Surface TNF $\alpha$  on Human Lymphoid Cells and Cell Lines and Appears to Recognize a Novel Epitope," *Cell. Immunol.* 152:569-581, 1993.**Primary Examiner**—Robert D. Budens  
**Attorney, Agent, or Firm**—James A. Giblin**[57]****ABSTRACT**Human monoclonal antibodies (mAbs) which bind to human TNF $\alpha$  are disclosed. Autoantibodies of both the IgM and IgG isotypes are disclosed. A preferred human monoclonal antibody is known as B5 (F78-1A10-B5 mAb) and it binds to recombinant human TNF $\alpha$  (rhTNF $\alpha$ ) in ELISA format with a titer comparable to three high affinity neutralizing mouse mAbs. It also binds to cell surface TNF $\alpha$  and prevents TNF $\alpha$  secretion by human monocyte cell lines.**12 Claims, 11 Drawing Sheets**